

Notice of Allowability

Application No.

10/682,474

Examiner

Reena Aurora

Applicant(s)

SCHROEDER ET AL.

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment received on 6/23/05.
2. ☒ The allowed claim(s) is/are 1 - 9.
3. ☒ The drawings filed on 09 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/9/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Bot Ledyne
Primary Examiner

DETAILED ACTION

This communication is in response to election/restriction received on 06/23/05.

The applicant has canceled claims 10 – 13.

Allowable Subject Matter

Claims 1 – 9 are allowed.

The following is an examiner's statement of reasons for allowance: As to claims 1 – 5 and 8 - 9, the prior art fails to show a method for determining position of a target moving relative to a magnetic sensor including the steps of calculating a preselected number of mutually spaced voltage levels, each said voltage level corresponding to a respective voltage level of the at least one linear slope; and generating a plurality of position pulses, each position pulse being generated when the voltage level of the output of the magnetic sensor has a predetermined relationship with respect to a respective calculated voltage level on the at least one linear slope. These features taken together with the other limitations of the claims renders the claims allowable over prior art. As to claims 6 – 7, the prior art fails to show a method for determining position of a target moving relative to a magnetic sensor including the steps of calculating a voltage level when the preset number of pitches has occurred, wherein the voltage level corresponds to a respective voltage level of the at least one linear slope; and generating a position pulse when the voltage level of the output of the magnetic sensor has a predetermined relationship with respect to the calculated voltage level on the at least

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one linear slope. These features taken together with the other limitations of the claim renders the claims allowable over prior art.

Prior Art of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schroeder (6,486,657) is cited for its disclosure of malfunction detector for magnetoresistor speed and position sensors.

Schroeder et al. (6,577,123) is cited for its disclosure of a linear position sensor assembly.

Omekanda et al. (6,894,486) is cited for its disclosure of a magnetic encoder with double frequency output.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Reena Aurora
Examiner



Bot Ledynh
Primary Examiner